## **APPENDIX G**

## **SPECIAL-PURPOSE RAILCARS**

LISTING OF TRAILER TRAIN EQUIPMENT SHOWING LENGTH, WIDTH, HEIGHT, LIGHT WEIGHT, LOAD LIMIT AND TYPE OF DRAFT GEAR. ALSO "REMARKS" PERTAINING TO THEOVERALL CONFIGURATION, SPECIAL TIEDOWN DEVICES, AND SPECIFIC PURPOSE OFEACH TYPE OF CAR.

(The following information is extracted from Trailer Train Company Equipment Brochure.)

Туре	Length over end sills	Width	Height	Lt. weight	Load limit	Draft gear	Remarks
TTX	49'-4 <sup>3/</sup> <sub>4</sub> "	8'-2"	3' - 5 <sup>1/</sup> <sub>8</sub> "	57,000	153,000(F30D)	Conv.	1
	,			,	*112,000 (F30G)		
TTX	75'-0"	.8'-2"	3' - 5 <sup>5/</sup> 8"	76,300 to	**128,000 to	Cony.	2
				82,000	133,700	,	
TTX	85'-0"	8-2"	3' - 5 <sup>1/</sup> 2"	67,500 to	*135,000	Conv.	3
				92,000			
TTX	89'-0"	8'-2" to	3' - 3" to	63,000 to	135,000	Conv.	4
		9'-0"	3' - 5 <sup>1/</sup> 2"	82,500			
ATTX	75'-0"	8' - 10 <sup>1/</sup> <sub>2</sub> "	3' - 5 <sup>5/</sup> <sub>8</sub> "	72,000 to	**132,000 to	Conv.	4
				78,000	137,000		
BTTX	89'-0"	8'-2" to	$2' - 7^{1/}_{2}''$ to	54,000 to	**116,000 to	Conv. & Hydr.	6
		9'-0"	3' - 5 <sup>1/</sup> <sub>2</sub> "	82,500	135,000		
CTTX	85'-0"	8'-2"	3' - 5 <sup>1/</sup> <sub>2</sub> "	67,500 to	*135,000	Conv.	7
			1/	92,000			
CTTX	89'-0"	8'-2" to	$2' - 7^{1/2}''$ to	54,000 to	**116,500 to	Conv. & Hydr.	7
		9'-0"	3' - 5 <sup>1/</sup> <sub>2</sub> "	82,500	135,000		
ETTX	Same as CTTX,						8
	above.						
FTTX	60'-0"	10'-6"	3'-6"&	59,000 &	151,000 &	Hydr.	9
	001.011	01.24	3' - 8 <sup>3/</sup> 8"	67,000	153,000		10
FTTX	89'-0"	8'-2" to	3' - 3" to 3' - 5 <sup>1/</sup> <sub>2</sub> "	63,000 to	135,000	Cony. & Hydr.	10
	001.411	9'-0"		82,500	120.000	** 1	1.1
F'TTX	89'-4"	9'-0"	3' - 6"	65,000 apprx.	130,000	Hydr.	11
GTTX	85'-0"	8'-4"	3' - 1 <sup>1/</sup> <sub>2</sub> "	68,400	135,000	Cony.	12
GTTX	89'-4"	8'-8"	3' - 1 <sup>1/</sup> 2"	70,600	135,000	Conv,	13
HTTX	60'-0"	10'-6"	3' - 8 <sup>3/</sup> 8"	70,000	150,000	Hydr.	14
ITTX	89'-0"	8'-6"	3' - 5 <sup>1/</sup> <sub>2</sub> "	74,800	135,000	Hydr.	15
ITTX	89'-0"	8'-6"	3' - 3 <sup>1/</sup> <sub>2</sub> "	82,500	135,000	Hydr.	15
ITTX	89'-0"	8'-6"	3' - 3"	72,800	135,000	Hydr.	15

<sup>\*</sup>See remarks number 7.

 $<sup>\</sup>ensuremath{^{**}}$  Load limits vary depending upon Light Weight of car.

				G-3			
Truna	Length over	Width	Haiaht	I t waight	I and limit	Duaft man	Damaulra
Туре	end sills		Height	Lt. weight	Load limit	Draft gear	Remarks
ITTX	89'-4"	8'-6"	3' - 6"		130,000	Hydr.	16
JTTX	89'-0"	8'-2" to	$3' - 3^{1/2}$ " to	63,000 to	135,000	Cony. &	17
		9'-0"	3' - 5 <sup>1/</sup> <sub>2</sub> "	82,500		Hydr.	
JTTX	89'-0"	8'-2" to	2' - 7 <sup>1/</sup> <sub>2</sub> "	54,000 to	**118,000 to	Conv. &	17
		9'-0"		62,500	137,000	Hydr.	
KTTX	89'-0"	Same as JTTX				Hydr.	18
LTTX	89'-0"	8'-2"	2' - 71/2"	54,000 to	**118,000 to	Conv.	19
				62,500	137,700		
MTTX	60'-0"	10'-6"	3' - 8 <sup>3/</sup> 8"	67,000&	153,000 &	Hydr.	20
				70,000	150,000		
MTTX	85'-0"	8'-2"	3' - 5 <sup>1/</sup> 2"	67,500 to	185,00	Conv.	20
				70,500			
OTTX	60'-0"	10'-6"	3' -8 <sup>3/</sup> <sub>8</sub> "	69,000 to	**149,000	Hydr.	#21
				71,000	151,000		
PTTX	60'-0"	10'-6"	3' -8 <sup>3/</sup> <sub>8</sub> "	75,000	145,000	Hydr.	#22
RTTX	89'-0"	Same as JTTX					#23
STTX	85'-0"	Same as JTl'X					#24
XTTX	89'-0"	.8'-2"	3' - 5 <sup>1/</sup> <sub>2</sub> "	73,300	135,000	Conv.	#25
XTTX	89'-0"	8'-8"	3' - 1 <sup>1/</sup> <sub>2</sub> "	70,600	*135,000	Cony.	#26
ZTTX	85' -0"	8'-2"	3' - 5 <sup>1/</sup> <sub>2</sub> "	67,500 to	*135,000	Cony.	#27
				70;500		-	
TTAX	89'-4"	9'-0"	3' - 51/2"	68,500	151,000	Hydr.	8
TTBX	89'-4"	8'-6"	3' - 6"		130,000	Hydr.	9
TTCX	89'-4"	9'-0"	3' - 5 <sup>1/</sup> <sub>2</sub> "	64,500	155,500	Hydr.	0
TTDX	89'-4"	8'-6"	3' - 6"		130,000	Hydr.	1
TTHX	89'-0"	8'-6"	3' - 5 <sup>1/</sup> <sub>2</sub> "	74,800	135,000	Hydr.	1
TTHX	60'-0"	10'-6"	3' - 8 <sup>3/</sup> 8"	69,000	151,000	Hydr.	2

Туре	Length over end sills	Width	Height	Lt. weight	Load limit	Draft gear	Remarks
TTKX	89'-4"	8'-6"	3'-6"		130,000	Hydr.	3
TTRX	89 -4"	8'-6"	3'-6"		130,000	Hydr.	4
TTX-101	89'-0"'	9'-0"	3' - 5 <sup>1/</sup> <sub>2</sub> "		130,000	Hydr.	35
'ITX-102	89'-0"	9'-1"	3'-6"		130,000	Conv.	36
TTX-103	89'-0"	9'-0"	3' - 5 <sup>1/</sup> 2"		130,000	Conv.	37
TTX-104	89'-0"	9'-0"	3' - 5 <sup>1/</sup> <sub>2</sub> "		130,000	Conv.	38

## **REMARKS**

- 1. (TTX) These cars are equipped with one hitch for the transportation of one trailer up to 43 feet in length. The underframe is cast steel with a wooden floor. Conventional draft gears are used for end-of-car cushioning. Cars marked F30CG have a "Starred Load Limit"
- 2. (TTX) The underframe on the majority of 75 foot cars is an all welded steel structure with a small percentage of cars (F39B) having a cast steel underframe. The welded steel and cast steel underframes have a fish belly center sill. Class F39, F39A, and F39C have a wood deck with an exposed steel center sill top cover plate extending the full length of the car. Class F39B has an all wood deck. Conventional friction draft gears are used for end-of-car cushioning. The Lightweight varies from 76,000 to 82,000 pounds depending upon the car used. The Load Limit varies from 128,000 pounds to 133,700 pounds accordingly. These cars are equipped with two hitches for the transportation of two trailers up to 35 feet in length.
- 3. (TTX) These cars are equipped with two hitches for the transportation of two trailers up to 40 feet in length. The underframe is an all welded steel structure with a fish belly center sill. Two types of floors are used, an all steel floor and a combination wood and steel floor. A conventional draft gear is used for end-of-car cushioning. The side sills are utilized as outside trailer guide rails, and extend 8 inches above the deck of the car. The side sills are also stress carrying members of the underframe. Classes F85D, F85E, and F85F are equipped with auxiliary guide rails which when removed, increase the width between the guide rails to 8 feet 6 inches. All cars have (\*)'Starred Load Limit except F85M which has a Load Limit of 128,000 lbs.
- 4. (TTX) Standard deck cars in trailer service equipped with two hitches for the transportation of two trailers, one up to 45 feet in length and one up to 40 feet in length. These cars consist of two basically different types of flat cars, a standard deck and a low deck car. The underframe of these cars is an all welded steel structure with a fish belly center sill and all steel floor. Eighty-nine feet cars in trailer service (cars equipped with hitches use conventional draft gears for end-of-car cushioning. Eighty-nine feet cars equipped with auto racks, or equipped for saddleback service, military service or autoframe service use hydraulic draft gears for end-of-car cushioning. Hitches and container supports are cushioned when used on cars having friction type gears. F9OHS and F9OPHS are equipped with hydraulic sliding sills. The letter "H" in class denotes car equipped with hydraulic draft gears.
- 5. (ATTX) These cars are equipped with continuous tiedown loops at the center of the car and tiedown rails at the sides, for the transportation of small vehicles such as army trucks, jeeps, mail trucks, and other general commodities. The underframe on the majority of 75 foot cars is an all welded steel structure with a small percentage of cars (F39B) having a cast steel underframe. The welded steel and cast steel underframes have a fish belly center sill. Class F39, F39A, and F39C have a wood deck with an exposed steel center pill top cover plate extending the full length of the car. Class F39B has an all wood deck. Conventional friction draft gears are used for end-of-car cushioning.
- 6. (BTTX) Standard or low deck cars equipped with bilevel auto racks. 89-foot cars equipped with auto racks or equipped for saddleback service, military service or autoframe service use hydraulic draft gears for end-of-car cushioning. Hitches and container supports are cushioned when used on cars having a friction type gear. F89OHS and F89PHS classes are equipped with hydraulic sliding sills. These cars consist basically of two different types of flatcars, a standard deck and a low deck car. The underframe of these cars is an all welded steel structure with a fish belly center sill and all steel floor.
- 7. (CTTX) These cars are equipped with special devices for the transportation of two 40 foot containers. The underframe is an all welded steel structure with a fish belly center sill. Two types of floor are used, an all steel floor and a combination wood and steel floor. A conventional draft gear is used for end-of-car cushioning. The side sills are utilized as outside trailer guide rails, which extend 8 inches above the deck of the car. The side sills are also stress carrying members of the underframe. Note, all cars listed in tables have (\*) Starred Load Limit except the F85M which has a Load Limit of 128,000 pounds.
- 8. (ETTX) Standard or low deck car equipped with elevating trilevel auto racks. The underframe is an all welded steel structure with a fish belly center sill and all steel floor. Eighty-nine foot cars equipped with auto racks use hydraulic draft gears for end-of-car cushioning
- 9. (FTTX) Auto Frame Cars. Same basic car as described in Remark number 20, but supplied with special tiedown equipment for the transportation of automobile frames. The underframe is all welded steel structure with a fish belly center sill. Wood deck is treated oak. Hydraulic draft gears are used for end-of-car cushioning.
- 10. (FTTX) Standard flush deck car equipped with special tiedown equipment for transportation of automobile frames. Eighty-nine foot cars used for saddleback service, military service or autoframe service use Hydraulic draft gears for end-of-car cushioning. The underframe of this car is an all welded steel structure with a fish belly center sill and all steel floor.
- 11. (FTTX) 89 foot 4 inch flush deck car equipped with special tiedown equipment for the transportation of automobile frames. The underframe is an all welded steel structure with an all welded steel floor. Cars equipped for autoframe service use hydraulic draft gears for end-of-car cushioning. This car provides a clear loading area 9 feet 0 inch wide by 89 feet 4 inches long.
- 12. (GTTX) 85 foot and 89 foot cars which are equipped with two hitches for the transportation of two trailers up to 40 feet in length. These cars have a center sill which extends 8 inches above the deck. Attached to the center sill on each side is a cushioned rub rail which acts as an inner guide rail. The underframe consists of a fish belly center sill with cross members. No side sills are used on the car. The floor is a steel box section, one section on each side of the center sill with longitudinal floor stringers enclosed.

  13. (GTTX) Same as Remark number 12.
- 14. (HTTX) This car is the same basic car as described in Remark number 20, except that this car is equipped with special heavy duty tiedown anchors and chain assemblies contained in channels along the sides of the car and adjacent to the center sill on each side. Each outboard channel contains nine tiedown anchors while each inboard channel contains ten tiedown anchors. The movable and retractable tiedown anchors are equipped with chain assemblies having a load binder, heavy duty compression unit, adjustable grab hook and 1/2 inch alloy chain with a working load limit of 11,250 lbs (proof test 27,500 lbs). This type of car, HTTX, replaces type TTHX as the 60 foot heavy duty tiedown car.
- 15. (ITTX) Standard deck cars equipped with special foldaway pedestals and sixty-two movable ratchet type winches with 3/8 inch alloy chains having a working load limit of 6,600 lbs (proof test 18,000 lbs), contained in channels. These cars are used in the transportation of trailer tractors loaded "saddleback" style. The underframe is an all welded steel structure with a fish belly center sill and all steel floor. Hydraulic draft gears are used for end-of-car cushioning and hydraulic sliding sills.
- 16. (ITTX) Eighty-nine feet 4 inches flush deck cars equipped with special adjustable and foldaway pedestals 2 feet 0 inch high and 2 feet 0 inch long Tiedown equipment consists of sixty-two movable ratchet type winches with 3/8 inch x 10 feet long alloy chains having a working load of 6,600 lbs (proof test 18,000 lbs) contained in channels. These cars are used in the transportation of trailer tractors loaded "saddleback" style.
- 17. (JTTX) These cars consist of two basically different types of flat cars. The underframes of these cars are an all welded steel structure with

- a fish belly center sill and all steel floor. Miscellaneous devices are applied by members for special services. Cars in trailer service use conventional draft gears. Cars equipped with auto racks, or equipped for saddleback service, military service or autoframe service use hydraulic draft gears for end-of-car cushioning.
- 18. (KTTX) Same as Remark number 4. These cars are standard or low deck cars with hinged end and trilevel auto racks.
- 19. (LTTX) These cars are low deck cars in trailer service equipped with two hitches for the transportation of two trailers up to 40 feet in length. Conventional draft gears for end-of-car cushioning.
- 20. (MTTX) (60 feet) The underframe is an all welded steel structure with a fish belly center sill. The wood deck is treated oak. Hydraulic draft gears are used for end-of-car cushioning. The basic car is the General Purpose Car. This car has side and end stake pockets, lading stray anchor along the side of the car, and on each side near the longitudinal center line of the car. The securements to the underframe of the sid angles and longitudinal steel members adjacent to the center sills are so designed that these members can be lowered for the installation of special tiedown channels for the Agriculture and Heavy Duty Equipment Cars. 85 foot cars are equipped with special devices, side stake pockets, sixteen per car, and used for the transportation of up to 80 foot lengths of pipe. Conventional draft gears are used on these cars for end-of-car cushioning.
- 21. (OTRX) Agricultural Equipment Flat Car. Same basic car as described in Remark number 20, except car is equipped with special tiedown channels along the sides of the car and adjacent to the center sill on each side. Each outboard channel contains twenty winches, while each inboard channel has twelve winches. The movable and retractable ratchet winches are equipped with chain tiedown assemblies with 3/8 inch alloy chain having a working load limit of 6,600 pounds (proof test 18,000 lbs).
- 22. (PTTX) Bulkhead Flat Cars. This is the same basic car as described in remark number 20, (60 foot), but with a bulkhead applied near each end of the car for the transportation of wallboard, plywood, etc. In addition these cars have special lading strap anchors.
- 23. (RTTX) Basically the same car as in remark number 4. These are standard or low cars equipped with trilevel auto racks.
- 24. (STTX) These cars are equipped with hitches and assigned to Freight Forwarders. The underframe is all welded steel structure with a fish belly center sill. Two types of floors are used, an all steel floor and a combination wood and steel floor. Conventional draft gears are used for end-of-car cushioning. The side sills are utilized as outside trailer guide rails, which extend 8 feet above the deck of the car. The side sills are also stress carrying members of the underframe.
- 25. (XTTX) Standard deck cars equipped with four hitches for the transportation of 28 foot trailers or two trailers, one up to 45 feet and one up to 40 foot in length. Conventional draft gears are used for end-of-car cushioning. The underframe of these cars is an all welded steel structure with a fish belly center sill and all steel floor.
- 26. (XTTX) The G-89 (89 feet) is equipped with four hitches for the transportation of three 27 foot 7 inch trailers or two trailers up to 40 foot in length. These cars have a center sill which extends 8 inches above the deck. Attached to the center sill, on each side, is a cushioned rub rail which acts as an inner guide rail. The underframe consists of a fish belly center sill with crossmembers. No side sills are used on this car. The floor is a steel box section, one section on each side of the center sill, with longitudinal floor stringers enclosed
- 27. (ZTT,X) These cars are equipped with special side stake pockets, thirty per car, and used for the transportation of long poles. Conventional draft gears are used for end-of-car cushioning. The underframe is all welded steel structure with fish belly center sill. Two types of floor are used, on all steel floor and a combination wood and steel floor.
- 28. (TTAX) These cars are equipped with knock-down hitches, center rub rails, bridge plates, movable container pedestals and hydraul draft gears. They may be loaded with two trailers, one up to 45 feet and one up to 40 feet in length or combination of various length containers from 20 feet to 40 feet. A combination of a trailer up to 40 foot long and a container up to 40 foot long may also be loaded. The underframe is an all welded steel structure with an all welded steel floor. The car provides a clear loading area 9 feet 0 inch by 89 feet 4 inches.
- 29. (TTEX) Car has a flush deck equipped with bilevel auto racks. Hydraulic draft gears are used for end-of-car cushioning. All welded steel underframe with an all welded steel floor.
- 30. (TTCS) Flush deck cars equipped with movable container pedestals for the transportation of various combinations of containers from 20 feet to 40 feet. Hydraulic draft gears are used for end-of-car cushioning. All welded steel underframe with all welded steel floor.
- 31. (TTDX) Flush deck car equipped with sixteen movable screw type winches with 1/2-inch x 9 feet long alloy chain having a working load limit of 11,250 lbs. (proof test 22,500 pounds. For the transportation of military vehicles loaded in a semi-saddleback style. Hydraulic draft gears are used for end-of-car cushioning. All welded steel underframe with all welded steel floor.
- 32. (TTHX) Same basic car as described in Remark number 20, but equipped with eighteen heavy duty chain assemblies with 1/2 inch alloy chain having a working load limit of 11,250 pounds (proof test 27,500 pounds). These chain assemblies are attached to castings which are retained in the side stake pockets of the car. There are nine per side, three at the center of the car and three over each truck. This type of car is still in service but has been replaced by the HTTX. See Remark number 14.
- 33. (TTKX) Hinged End Trilevel Auto Rack on 89 foot 4 inch car equipped with hydraulic draft gears for end-of-car cushioning.
- 34. (TTRX) Trilevel Auto Rack on 89 foot 4 inch car equipped with hydraulic draft gears for end-of-car cushioning.
- 35. (TTX-101) This car has special hydraulic draft gear with 13 3/8 inches hydraulic travel and 1 5/8 inches rubber travel for car cushioning. Container and hitch cushioning from hydraulic draft gears. Handles 20 feet, 24 feet, 35 feet and 40 feet on adjustable pedestals. Contains hitches, guide rails and bridge plates for piggyback handling.
- 36. (TTX-102) Standard friction draft gears for end-of-car cushioning. Container cushioning consists of single rubber-pad-in-shear per pedestal. Fore and aft pedestals work in unison through a tie-rod (travel 14 inches). Hitch cushioning is accomplished by rubber pads in shear. Handles 20 foot and 40 foot containers on fixed pedestals. Car has hitches, guide rails, and bridge plates for piggyback handling.
- 37.-(TTX-103) This car has standard friction draft gears for end-of-car cushioning. Container cushioning is obtained from two rubber pads in series per pedestal and acting in shear. All pedestals act independently (travel 20 inches). Hitch cushioning is through rubber pads in shear. Handles 40 foot containers only on fixed pedestals. Hitches, guide rails, and bridge plates are available for piggyback handling.
- 38. (TTX-104) Standard friction draft gears for end-of-car cushioning. Container cushioning is obtained from rub-rails connected to rubberpads-in-shear having 14 inch travel. Hitch cushioning is through rubber pad in shear. Handles all lengths of containers on adjustable transverse bolsters. Hitches, guide rails and bridge plates are available for piggyback handling.